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(71) Applicant (for all designated States except US): PRINT-  
ABLE FIELD EMITTERS LIMITED [GB/GB]; Atlas Cen-  
tre, Rutherford Appleton Laboratory, Chilton, Didcot OX11  
0QX (GB).

(72) Inventors; and  
(75) Inventors/Applicants (for US only): TUCK, Richard, Allan  
[GB/GB]; 34 Park Lane, Slough SL3 7PF (GB). BISHOP,  
Hugh, Edward [GB/GB]; 19 Appleford Drive, Abingdon  
OX14 2BZ (GB).

(74) Agent: STANLEY, David, William; Kings Court, 12 King  
Street, Leeds LS1 2HL (GB).

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(57) Abstract

A field electron emission material is formed by coating a substrate (221, 230) having an electrically conductive surface with a plurality of electrically conductive particles (223, 231). Each particle has a layer of electrically insulating material (222, 232) disposed either in a first location between the conductive surface of the substrate (221) and the particle (223), or in a second location between the particle (231) and the environment (237) in which the field electron emission material is disposed, but not in both of such first and second locations, so that at least some of the particles (223, 231) form electron emission sites at such first or second locations. A number of field emission devices are disclosed, utilising such electron emission material.

